

CARDINAL VILLAGE

Upshur Taylor
5021 Holland Road
New Church, VA 23415
Phone (757) 824-5989 (FAX)
Cell (757) 894-1999

October 3, 2014



Mr. Robert E. Smithson, Jr.
Environmental Engineer Sr.
Dept. of Environmental Quality
Tidewater Regional Office
5636 Southern Blvd.
Virginia Beach, VA 23462

RE: Cardinal Village - VPDES Permit No. VA0065196
Completion of Items Needed for Permit Application

Dear Mr. Smithson:

Attached you will find the items completed that were needed to complete my application for Cardinal Village - VPDES Permit No. VA0065196

EPA Form 2A - enclosure #1

Pg. 2, A.6 - completed

Pg. 2, A-12 - completed

Signature page is initialed and redated

Sewage Sludge Application Form - enclosure #2

Part I. item #1 - completed

Addendum Application Form - enclosure #3

Item #5 - completed

Item #9 - completed

Closure Plan - enclosure #4

The Closure Plan is current and correct.

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Additionally, I am sending you a copy of the letter I received from DEQ requesting an increase in the financial assurance and a confirmation from PNC that the increase has been taken care of. (enclosure #5).

If there are any other questions or information needed please contact me at 757-894-1999.

Sincerely,

A handwritten signature in cursive script, reading "Upshur J. Taylor". The signature is written in dark ink and is positioned above the printed name.

Upshur J. Taylor
Owner, Cardinal Village

FACILITY NAME AND PERMIT NUMBER: *Cardinal Village*
VPDES Permit No. VA 0065196

Form Approved 1/14/99
OMB Number 2040-0086

FORM
2A
NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

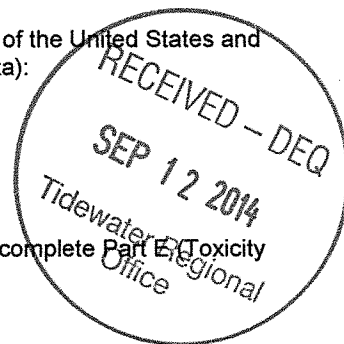
Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).



ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER: Cardinal Village
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BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name Cardinal Village
Mailing Address 5021 Holland Road
New Church, VA 23415
Contact person Upshur J. Taylor
Title owner
Telephone number 757-894-1999
Facility Address 6379 Lankford Highway
(not P.O. Box) New Church, VA 23415

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name N/A
Mailing Address _____
Contact person _____
Title _____
Telephone number _____

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☐ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES _____
UIC _____
RCRA _____

PSD _____
Other VPDES Permit No. VA0065196
Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>Cardinal Village</u>	<u>40</u>	<u>separate</u>	<u>private</u>
_____	_____	_____	_____
_____	_____	_____	_____
Total population served	<u>40</u>		

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A.5. Indian Country. N/A

a. Is the treatment works located in Indian Country?

 Yes No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

 Yes No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 200 mgd

Two Years Ago

Last Year

This Year

b. Annual average daily flow rate .002 .002 .002 mgd

c. Maximum daily flow rate .002 .003 .004 mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

✓ Separate sanitary sewer 100 %
 Combined storm and sanitary sewer %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.?

✓ Yes No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1

ii. Discharges of untreated or partially treated effluent

iii. Combined sewer overflow points

iv. Constructed emergency overflows (prior to the headworks)

v. Other

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

 Yes ✓ No

If yes, provide the following for each surface impoundment:

Location:

Annual average daily volume discharged to surface impoundment(s) mgd

Is discharge ✓ continuous or intermittent?

c. Does the treatment works land-apply treated wastewater?

 Yes ✓ No

If yes, provide the following for each land application site:

Location:

Number of acres:

Annual average daily volume applied to site: Mgd

Is land application continuous or intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

 Yes ✓ No

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

_____ Yes

☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or ☒ intermittent?

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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number

001

b. Location

Cardinal Village
New Church, VA

(City or town, if applicable)

23415

(Zip Code)

Accomack

(County)

Virginia

(State)

Deg 37 min 57 sec 15

(Latitude)

Deg 75 min 32 sec 30

(Longitude)

c. Distance from shore (if applicable)

N/A ft.

d. Depth below surface (if applicable)

N/A ft.

e. Average daily flow rate

.002 mgd

f. Does this outfall have either an intermittent or a periodic discharge?

 Yes ✓ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs:

365 days (daily)

Average duration of each discharge:

all day

Average flow per discharge:

1500 gallons per day mgd

Months in which discharge occurs:

all 12 months

g. Is outfall equipped with a diffuser?

 ✓ Yes No

A.10. Description of Receiving Waters.

a. Name of receiving water

unnamed ditch to Tunnells Mill to Bullbeggar Creek

b. Name of watershed (if known)

to Chesapeake Bay

United States Soil Conservation Service 14-digit watershed code (if known):

N/A

c. Name of State Management/River Basin (if known):

N/A

United States Geological Survey 8-digit hydrologic cataloging unit code (if known):

d. Critical low flow of receiving stream (if applicable):

acute cfs N/A chronic cfs

e. Total hardness of receiving stream at critical low flow (if applicable): N/A mg/l of CaCO₃

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A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

☒ Primary ☒ Secondary
☐ Advanced ☐ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal85-94.9 %

Design SS removal

85-94.9 %

Design P removal

unknown %

Design N removal

unknown %

Other _____

N/A %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒ Yes ☐ No

d. Does the treatment plant have post aeration?

☒ Yes ☐ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	<u>7.6</u>	s.u.			
pH (Maximum)	<u>7.7</u>	s.u.			
Flow Rate	<u>.003 (MGD)</u>				
Temperature (Winter)					
Temperature (Summer)					

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5						
	CBOD-5	<u>.02</u>	<u>MG/D</u>	<u>.02</u>	<u>mg/L</u>	<u>3</u>	<u>5210B</u>
FECAL COLIFORM		<u>N-D</u>					
TOTAL SUSPENDED SOLIDS (TSS)		<u>.01</u>	<u>MG/D</u>	<u>< 1.0</u>	<u>mg/L</u>	<u>3</u>	<u>2540D</u>

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: Cardinal Village
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BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

0 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

Yes ☒ No N/A

N/A

	Schedule	Actual Completion
Implementation Stage	MM / DD / YYYY	MM / DD / YYYY
– Begin construction	___/___/___	___/___/___
– End construction	___/___/___	___/___/___
– Begin discharge	___/___/___	___/___/___
– Attain operational level	___/___/___	___/___/___

Describe briefly: _____

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: Cardinal Village

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BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)

☐ Part E (Toxicity Testing: Biomonitoring Data)

☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Upshur J. Taylor - owner/operator

John W. Cline - Class II Operator/operator-in-charge

Signature Upshur J. Taylor

John W. Cline - Class I Operator

Telephone number 757-894-1999

Date signed 09-06-2014 redated 10-3-2014

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER: Cardinal VillageForm Approved 1/14/99
OMB Number 2040-0086VPDES Permit No. VA0065196**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)☐ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title

Upshur J. Taylor - owner/operatorJohn W. Cline - Class II Operator/operator-in-charge

Signature

Upshur J. TaylorJohn W. Cline - Class I Operator

Telephone number

757-894-1999

Date signed

09-06-2014

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER: Cardinal Village
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SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

N/A

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO ₃)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GH)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER: Cardinal Village
VPDES Permit No. VA0065196

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER: Cardinal Village
 VPDES Permit No. VA 0065196

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SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

N/A

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ____ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: _____ Test number: _____ Test number: _____

a. Test information.

Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

b. Give toxicity test methods followed.

Manual title			
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection			
After dechlorination			

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Test number: _____ Test number: _____ Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

Salinity

Temperature

Ammonia

Dissolved oxygen

l. Test Results.

Acute:

Percent survival in 100% effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

___ Yes ___ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER: Cardinal Village
VPDES Permit No. VA0065196

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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F. N/A

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?
☐ Yes ☐ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. _____

b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.
_____ gpd (☐ continuous or ☐ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.
_____ gpd (☐ continuous or ☐ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☐ Yes ☐ No

b. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

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F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?
☐ Yes ☐ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ☐ Yes ☐ No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):
☐ Truck ☐ Rail ☐ Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units
_____	_____	_____
_____	_____	_____
_____	_____	_____

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?
☐ Yes (complete F.13 through F.15.) ☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?
☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?
☐ Continuous ☐ Intermittent

If intermittent, describe discharge schedule.

END OF PART F.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

N/A

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- a. All CSO discharge points.
- b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- c. Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- a. Locations of major sewer trunk lines, both combined and separate sanitary.
- b. Locations of points where separate sanitary sewers feed into the combined sewer system.
- c. Locations of in-line and off-line storage structures.
- d. Locations of flow-regulating devices.
- e. Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

- a. Outfall number _____
- b. Location
(City or town, if applicable) _____ (Zip Code) _____
(County) _____ (State) _____
(Latitude) _____ (Longitude) _____
- c. Distance from shore (if applicable) _____ ft.
- d. Depth below surface (if applicable) _____ ft.
- e. Which of the following were monitored during the last year for this CSO?
____ Rainfall ____ CSO pollutant concentrations ____ CSO frequency
____ CSO flow volume ____ Receiving water quality
- f. How many storm events were monitored during the last year? _____

G.4. CSO Events.

- a. Give the number of CSO events in the last year.
_____ events (____ actual or ____ approx.)
- b. Give the average duration per CSO event.
_____ hours (____ actual or ____ approx.)

FACILITY NAME AND PERMIT NUMBER: Cardinal Village
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c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

a. Name of receiving water: _____

b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

END OF PART G.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

VPDES Sewage Sludge Permit Application for Permit Reissuance

Instructions

WHO MUST SUBMIT THE APPLICATION - All facilities with a current VPDES Permit that authorizes the discharge of treated sewage wastewater that are applying for reissuance must complete and submit this application.
 Part 1 is general information to be provided by all facilities.
 Part 2 must be completed by all facilities that generate Class A or Class B biosolids that are land applied.
 Part 3 must be completed by all facilities that land apply Class B biosolids.

Part 1 - Sludge Disposal Management (To be completed by all facilities)

Facility Name: Cardinal Village

VPDES Permit No: VA0065196

1. Shipment Off Site for Treatment or Blending

Is sewage sludge from your facility sent to another facility that provides treatment or blending?
 If you send sewage sludge to more than one facility, attach additional sheets as necessary.

☒ Yes ☐ No

Shipment off site is: ☒ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Receiving Facility Name

b. Receiving Facility VPDES Permit No.

c. Include an acceptance letter from the Receiving Facility. Not Available

d. Receiving Facility's ultimate disposal method for sewage sludge It is run through treatment and put on a drying bed

2. Disposal in a Municipal Solid Waste Landfill

Is sewage sludge from your facility placed in a municipal solid waste landfill?
 If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

☐ Yes ☒ No

Landfilling is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Landfill Name

b. Landfill Permit No.

c. Include an acceptance letter from the landfill.

3. Incineration

Is sewage sludge from your facility fired in a sewage sludge incinerator?

☐ Yes ☒ No

Incineration is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
 If yes, provide the Air Registration No.

☐ Yes ☐ No

If no, complete items b - d for each incinerator that you do not own or operate.

b. Facility Name

c. Air Registration No.

d. Include an acceptance letter from the incinerator.

4. Class A Biosolids

Do you produce Class A biosolids for land application or distribution and marketing? If yes, complete Part 2.
 Are Class A biosolids from your facility land applied in bulk?

☐ Yes ☒ No

Do you sell or give away Class A biosolids in a bag or other container for application to the land? If yes, provide the
 VDACS certification number?

☐ Yes ☒ No

☐ Yes ☒ No

5. Class B Biosolids

Do you produce Class B biosolids? If yes, complete Part 2.

Are Class B biosolids from your facility land applied under the authorization of this VPDES Permit? If yes, complete Part 3.

☐ Yes ☒ No

☐ Yes ☒ No

Land Application Under a Separate Permit

Are biosolids from your facility land applied under the authorization of a permit other than your VPDES Permit?
 Biosolids are land applied under the authorization of a ☐ VPA permit ☐ Another VPDES Permit ☐ Out of State

☐ Yes ☒ No

Complete items a - c for each VPA permit authorized to land apply biosolids from your facility.

a. Permittee Name

b. Permit No.

c. Include copy of any information you provide to the Receiving VPDES or VPA Permittee to comply with the "notice and necessary information" requirement of 9VAC25-31-530 F.

VPDES Sewage Sludge Permit Application for Permit Reissuance

Instructions

WHO MUST SUBMIT THE APPLICATION - All facilities with a current VPDES Permit that authorizes the discharge of treated sewage wastewater that are applying for reissuance must complete and submit this application.
 Part 1 is general information to be provided by all facilities.
 Part 2 must be completed by all facilities that generate Class A or Class B biosolids that are land applied.
 Part 3 must be completed by all facilities that land apply Class B biosolids.

Part 1 - Sludge Disposal Management (To be completed by all facilities)

Facility Name: Cardinal Village

VPDES Permit No: VA00065196

1. Shipment Off Site for Treatment or Blending

Is sewage sludge from your facility sent to another facility that provides treatment or blending?

☐ Yes ☒ No

If you send sewage sludge to more than one facility, attach additional sheets as necessary.

Shipment off site is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Receiving Facility Name _____

b. Receiving Facility VPDES Permit No. _____

c. Include an acceptance letter from the Receiving Facility. _____

d. Receiving Facility's ultimate disposal method for sewage sludge _____

2. Disposal in a Municipal Solid Waste Landfill

Is sewage sludge from your facility placed in a municipal solid waste landfill?

☐ Yes ☒ No

If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

Landfilling is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Landfill Name _____

b. Landfill Permit No. _____

c. Include an acceptance letter from the landfill. _____

3. Incineration

Is sewage sludge from your facility fired in a sewage sludge incinerator?

☐ Yes ☒ No

Incineration is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?

☐ Yes ☐ No

If yes, provide the Air Registration No. _____

If no, complete items b - d for each incinerator that you do not own or operate.

b. Facility Name _____

c. Air Registration No. _____

d. Include an acceptance letter from the Incinerator. _____

4. Class A Biosolids

Do you produce Class A biosolids for land application or distribution and marketing? If yes, complete Part 2.

☐ Yes ☒ No

Are Class A biosolids from your facility land applied in bulk?

☐ Yes ☒ No

Do you sell or give away Class A biosolids in a bag or other container for application to the land? If yes, provide the VDACS certification number? _____

☐ Yes ☒ No

5. Class B Biosolids

Do you produce Class B biosolids? If yes, complete Part 2.

☐ Yes ☒ No

Are Class B biosolids from your facility land applied under the authorization of this VPDES Permit? If yes, complete Part 3.

☐ Yes ☒ No

Land Application Under a Separate Permit

Are biosolids from your facility land applied under the authorization of a permit other than your VPDES Permit?

☐ Yes ☒ No

Biosolids are land applied under the authorization of a ☐ VPA permit ☐ Another VPDES Permit ☐ Out of State

Complete items a - c for each VPA permit authorized to land apply biosolids from your facility.

a. Permittee Name _____

b. Permit No. _____

c. Include copy of any information you provide to the Receiving VPDES or VPA Permittee to comply with the "notice and necessary information" requirement of 9VAC25-31-530 F. _____

VPDES Sewage Sludge Permit Application for Permit Reissuance

Part 2 - Biosolids Characterization (To be completed by all facilities that generate biosolids that are land applied.)

1. Have there been changes to sludge treatment processes or storage facilities since the previous permit issuance/reissuance? ☐ Yes ☒ No
2. Do the biosolids generated under this permit that will be land applied meet one of the Class A pathogen requirements in 9VAC25-31-710 A 3 through A 8 or Class B pathogen requirements in 9VAC25-31-710 B 1 through B 4?
Identify the pathogen reduction option utilized to demonstrate compliance with the pathogen reductions requirements and provide the data that demonstrate compliance with the applicable alternative. ☐ Yes ☒ No
3. Do the biosolids generated under this permit that will be land applied meet one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 10?
Identify the vector attraction reduction option utilized to demonstrate compliance with the vector attraction reductions requirements and provide the data that demonstrate compliance with the applicable alternative. ☐ Yes ☒ No
4. Do the biosolids to be land applied meet the ceiling/pollutant concentrations in 9VAC25-31-540 B?
5. Has data from the most recent 3 samples for pH (S.U.), Percent Solids (%), Ammonium Nitrogen (mg/kg), Nitrate Nitrogen (mg/kg), Total Kjeldahl Nitrogen (mg/kg), Total Phosphorus (mg/kg), Total Potassium (mg/kg), Alkalinity as CaCO₃ (mg/kg), Arsenic (mg/kg), Cadmium (mg/kg), Copper (mg/kg), Lead (mg/kg), Mercury (mg/kg), Nickel (mg/kg), Selenium (mg/kg), Zinc (mg/kg) been submitted to DEQ? The samples shall be no more than 4½ years old and each sampling date shall be at least 1 month apart.
☐ Yes ☒ No
If no, provide the data with this application.

Part 3 - Land Application of Class B Biosolids (To be completed by all facilities that land apply Class B biosolids.)

1. Provide to DEQ and to each locality in which biosolids are to be land applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with 9VAC25-31-100 P 9.
2. For each site, provide a properly completed landowner agreement for each landowner, using the most current Land Application Agreement - Biosolids Form (VPDES Sewage Sludge Permit Application Form - Attachment to Section C).
3. Are any new land application fields proposed at this reissuance?
If yes, contact the DEQ Regional Office for additional submittal requirements. ☐ Yes ☒ No
4. For the currently permitted land application fields, are the previously submitted site booklets, maps and acreage accurate.
If no, contact the DEQ Regional Office for additional submittal requirements. ☐ Yes ☒ No
5. Does the facility's Biosolids Management Plan on file with DEQ include the following minimum information?
☐ Yes ☒ No
 - a. An odor control plan that addresses the abatement of odors resulting from the storage and/or land application of biosolids.
 - b. A description of the transport vehicles to be used.
 - c. Procedures for biosolids offloading at the land application site including spill prevention, cleanup (including vehicle cleaning), field reclamation, and emergency notification and cleanup measures.
 - d. A description of the land application equipment including procedures for calibrating equipment to ensure uniform distribution and appropriate loading rates.
 - e. Procedures used to ensure that land application activities address notification requirements, signage requirements, slope restrictions, operation limitations during periods of inclement weather, soil pH requirements, buffer zone requirements, and site restrictions.
 - f. Any other information necessary to ensure compliance with the requirements of the Biosolids Program of the VPDES Permit Regulation (9VAC25-31-420 through 720).

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title

Upshur J. Taylor / owner - operator
John W. Cline / class II operator - operator-in-charge

Signature

Upshur J. Taylor John W. Cline - operator-in-charge

Telephone number / Email

(757) 894-1999 upshurtaylor@icloud.com Class II

Date signed

09-06-2014

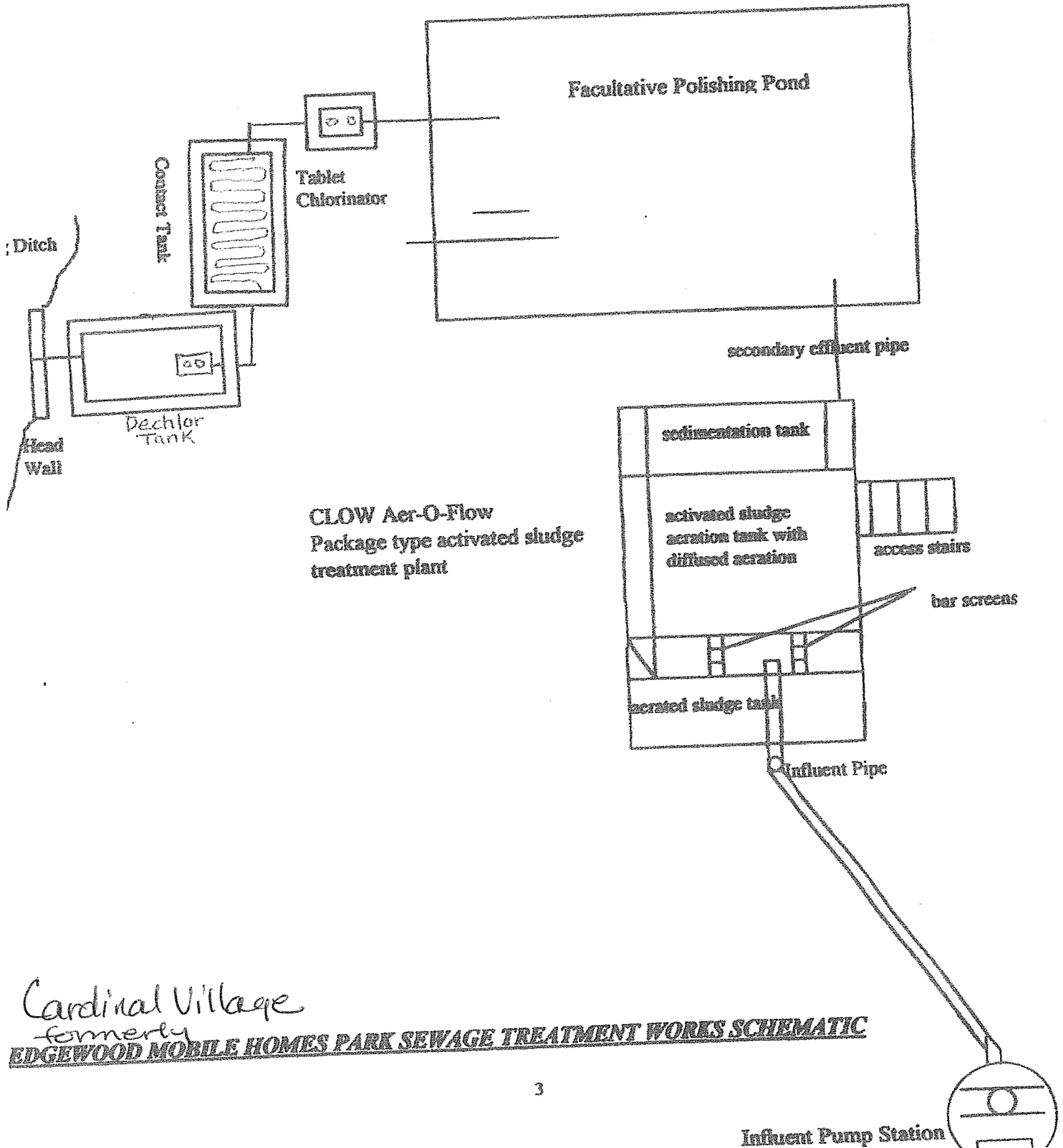
Based on a review of this information, it may be necessary to submit additional information to meet other legal or technical review requirements.)

Facility Name And Permit Number
Cardinal Village VA 0065196

Re: Page 3, #6 - Narrative Description of Sludge Process

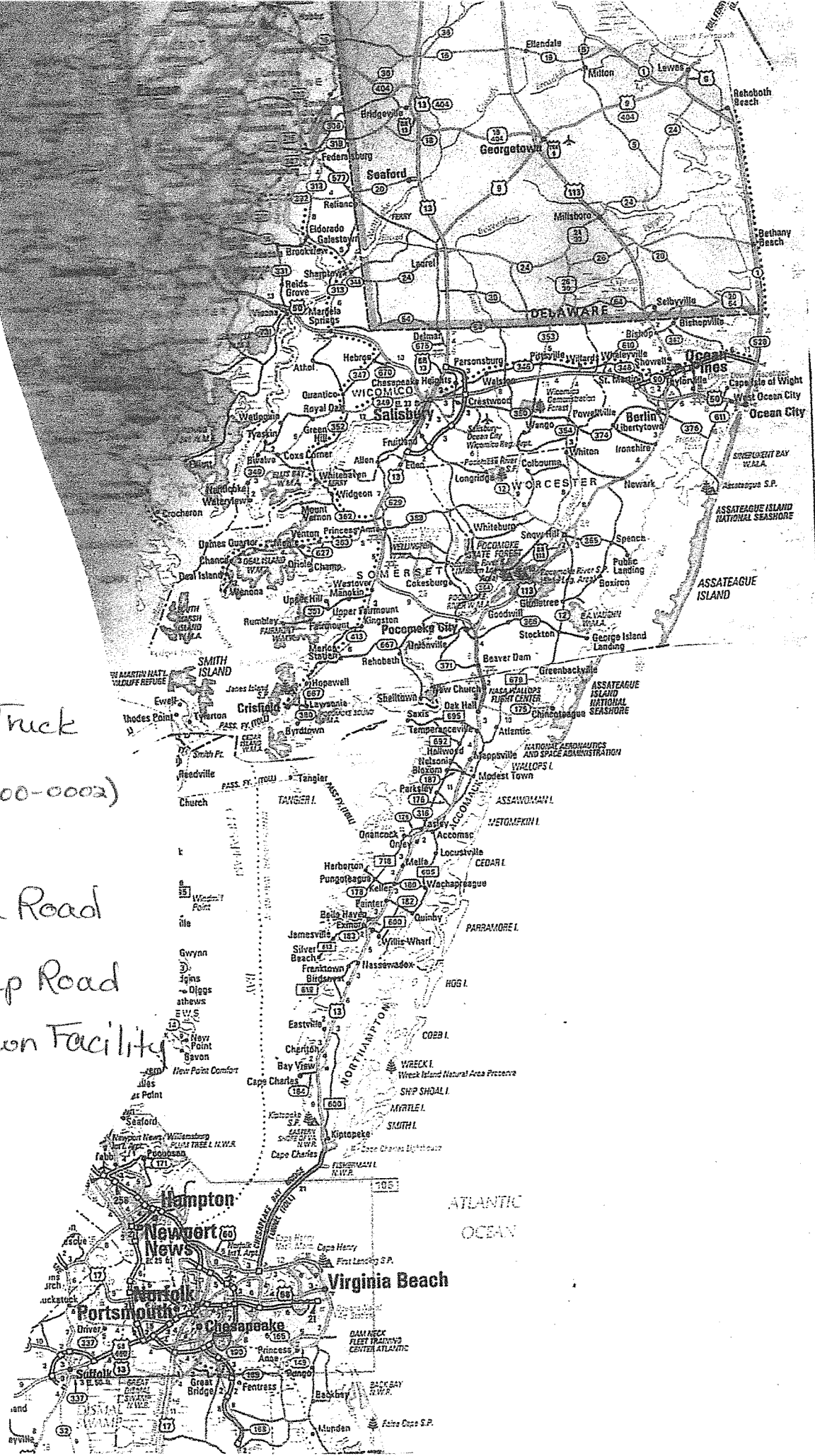
— This facility has a package plant which is a wastewater treatment facility that collects the sludge, stores the sludge, and treats the sludge all-in-one. It utilizes the "extended aeration treatment" process. Other treatment processes include: a polishing pond, a chlorination contact tank, and a dechlorination tank. The purpose of this equipment is to treat all sewage or water-borne waste generated by the mobile home park.

VPDES NO: VA0065196



Cardinal Village
formerly
EDGEWOOD MOBILE HOMES PARK SEWAGE TREATMENT WORKS SCHEMATIC

Bundick's Truck
 Route
 (Hauling Permit #09-100-0002)
 Rt. 13 North
 Turn left on
 Old Virginia Road
 Turn left on
 Dunn Swamp Road
 Pocomoke Town Facility
 on left



VPDES Permit Application Addendum

1. Entity to whom the permit is to be issued: Upshur Taylor
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. Is this facility located within city or town boundaries? Yes ☐ No ☒

3. Provide the tax map parcel number for the land where the discharge is located. 02700A00000/200

4. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? None

5. What is the design average effluent flow of this facility? .002 MGD
For industrial facilities, provide the max. 30-day average production level, include units:

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Yes ☐ No ☒
If "Yes", please identify the other flow tiers (in MGD) or production levels:

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. Nature of operations generating wastewater:

Households

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: _____

_____ % of flow from non-domestic connections/sources

7. Mode of discharge: ☒ Continuous ☐ Intermittent ☐ Seasonal
Describe frequency and duration of intermittent or seasonal discharges:

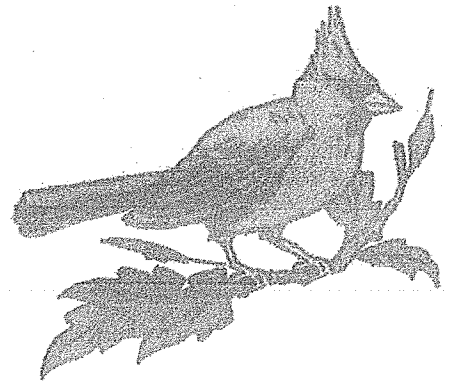
8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

- ☒ Permanent stream, never dry
☐ Intermittent stream, usually flowing, sometimes dry
☐ Ephemeral stream, wet-weather flow, often dry
☐ Effluent-dependent stream, usually or always dry without effluent flow
☐ Lake or pond at or below the discharge point
☐ Other: _____

9. Approval Date(s):

O & M Manual 2001 Sludge/Solids Management Plan _____

Have there been any changes in your operations or procedures since the above approval dates? Yes ☐ No ☒




CARDINAL VILLAGE

Upshur Taylor
5021 Holland Road
New Church, VA 23415
Phone (757) 824-5989
Cell (757) 894-1999

October 3, 2014

The Closure Plan for Cardinal Village is current and correct.



Upshur Taylor
Owner

CARDINAL VILLAGE
WASTEWATER TREATMENT
PLANT
CLOSURE PLAN

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Attachments

1. Bundick Well & Pump Service Letter
2. Sludge Hauling Route
3. Benny C. Hall & Son Service Letter

1.0 INTRODUCTION

Cardinal Village Mobile Home Park is located in Accomack County, Virginia, owned by Mr. Upshur J. Taylor. In accordance with the VPDES Permit Renewal requirements this plan has been prepared to provide specific direction related to the closure of the Wastewater Treatment Plant and the current estimated costs associated with the closure. Upon completion of this plan, the area formally occupied by the wastewater plant will become an open grass covered green area.

2.0 FACILITY DESCRIPTION

The plant is described as a 6000-gpd secondary treatment package plant with chlorination and dechlorination. It operates under VPDES Permit No. VA0065196, discharging into an unnamed ditch to Tunnels Mill Branch which flows to Bullbeggar Creek and then to the Chesapeake Bay. The plant is a self-contained metal unit.

3.0 CLOSURE PLAN

In the event of a closure of this plant the owner intends to hire a licensed contractor to complete this plan. The contractor will be responsible for all tasks associated with the plan and for obtaining all permits from Accomack County as required.

3.1 Tank Cleaning

All liquids and solids will be removed by means of a septic tank pump truck and disposed Of at Pocomoke Town Facility, Pocomoke City, Md. (See attached letter)
(Permit # 09-100-0002) will perform this task.

All surfaces will be high pressure

washed and disinfected with a spray on solution of sodium hypochlorite at 200 PPM.

Following disinfection all surfaces and equipment will be washed down with potable water. Rinse water will be dechlorinated with a Sodium Bisulfate Solution and disposed of in the sanitary sewer.

3.2 Demolition and Final Disposal

After tank cleaning, influent & effluent pipes will be physically disconnected and capped. All mechanical and electrical equipment and accessories will be removed and properly disposed of. The metal structure which is the plant will then be cut in to scrap and disposed of properly. The excavated site will then be backfilled with sand fill and capped with 3" of top soil.

3.3 Site Handling and Land Use After Closure

Preceding any land disturbance, erosion and sediment control measures will be implemented as required. After tank removal, the tank site will be back-filled with sand fill and top soil. The polishing pond will be filled in to grade as required with sand fill and top soil. The entire area will be brought to the existing predominant grade of the surrounding area with the Contractor ensuring that no ponding of water can occur on the site after final grade is established. The site will be seeded with a blend of fescue and rye grasses at an application rate of 150 pounds per acre and covered with straw.

4.0 CERTIFICATION

Upon completion of the closure, the owner or his designated representative shall verify the work was completed in accordance with the plan and provide written verification to both the Virginia Department of Health and Department of Environmental Quality.

5.0 COST ESTIMATE

It is estimated that to complete this plan at the time of its preparation will cost the owner \$5,510.00. This estimate includes \$1310.00 to Bundick Well & Pump Co. to clean, disinfect, and dispose remaining liquids and \$4,200.00 to Benny C. Hall & Son for excavation and burial of pump station and package plant, filling pond, grading to existing ground level, and seeding.

6.0 HAULING ROUTE

From Cutler's Court Road travel north on Route 13 and turn left on Old Virginia Road and turn left on Dunn Swamp Road and turn left into Pocomoke Town Facility, Pocomoke City, Md.

Bundick Well & Pump Company

P.O. Box 15
Painter, VA 23420

To: Upshur J. Taylor
re: Cardinal Village Mobile Home Park

From: Bundick Well & Pump Company
P.O.Box 15
Painter, VA 23420

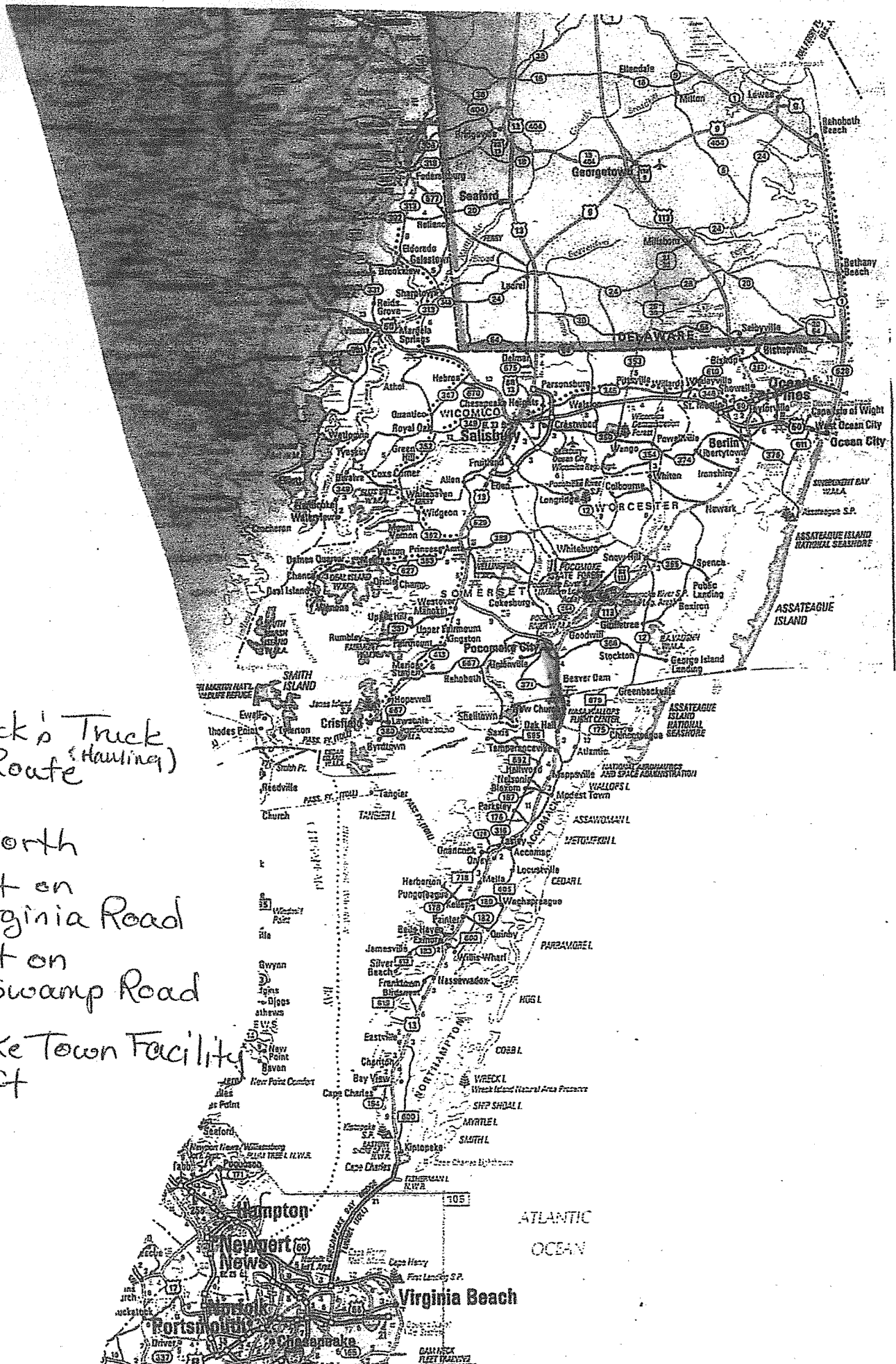
Bundick Well and Pump Company (Permit No. 09-100-0002) agrees to pump Cardinal Village and haul waste to the Pocomoke Town Facility located on Dunn Swamp Road, Pocomoke City, Md.

Waste Sludge is placed in a sludge holding tank until the tank is full. Waste tank is then emptied by our pumper truck at the rate of \$160.00 per 2000 gallon truck load. Sludge is taken to Pocomoke Town Facility, Pocomoke City, Md. For final disposal.

To properly clean, disinfect & dispose of remaining liquids of the pump station and package treatment plant the cost would be \$1,150.00.

If you have any questions please feel free to call 757-442-3555 or 757-824-3555.

Sincerely
Bundick Well & Pump Co.



Bundick's Truck
Route (Hauling)

Rt. 13 North
Turn left on
Old Virginia Road
Turn left on
Dunn Swamp Road
Pocomoke Town Facility
on left

**BENNY C. HALL & SON
8013 LONG LANE
TEMPERANCEVILLE, VA 23442**

To: Upshur J. Taylor
Cardinal Village Mobile Home Park

Re: Cost Estimate

The estimated cost for excavator work will be at the rate of \$200.00 per hour for 16 hours for a total of \$3,200.00. This will be for extracting pump station and package treatment plant and burial of the same using the existing berm that surrounds the pond which is approximately 5 1/2 - 6 feet in height and approximately 30 feet wide on a taper. This will be more than enough to fill the pond back in and the holes where the treatment package plant and lift station are located. For leveling to existing grade and reseeding the cost would be \$1000.00. Total bill \$4,200.00.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax: 804-698-4019 - TDD (804) 698-4021

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

March 28, 2014

Mr. Upshur J. Taylor
Cardinal Village Mobile Home Park
5021 Holland Road
New Church, Virginia 23415

RE: Financial Capability Demonstration for Cardinal Village Mobile Home Park
VPDES Permit Number VA0065196

Dear Mr. Taylor:

The Virginia Department of Environmental Quality (the Department), Office of Financial Responsibility Programs and Data Management, conducted a review of the financial capability files for this facility. Our files indicate that Cardinal Village Mobile Home Park should have updated its financial capability mechanism for the above-referenced facility by **January 25, 2014**. The Virginia Closure Plans and Demonstration of Financial Capability Regulation (the Regulation), 9 VAC 25-650 requires an owner or operator of a privately owned sewerage system to adjust the closure cost estimate annually for inflation, increase the amount of the financial capability mechanism to the adjusted cost estimate, and submit the updated financial capability mechanism to the Department.

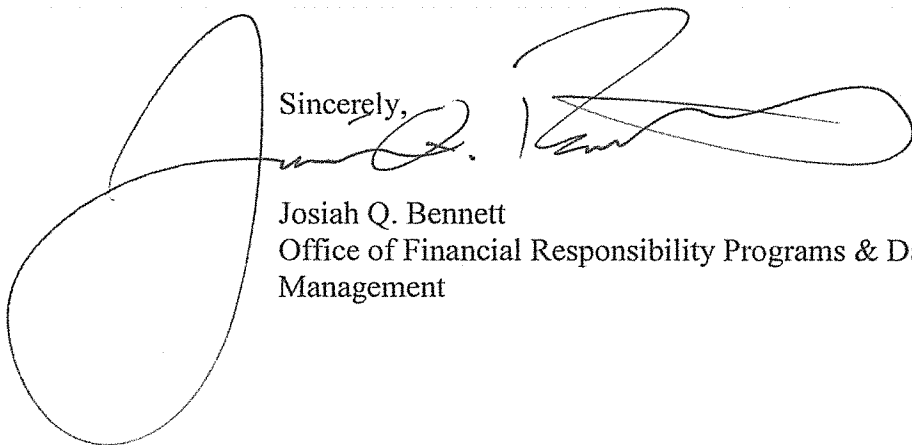
The closure cost estimate is adjusted by multiplying the current cost estimate by the current year's inflation factor. Below you will find the closure calculation for adjusting the 2014 cost estimate for inflation:

$\$5,980 \text{ (2013 cost estimate)} \times 1.014 \text{ (2014 inflation factor)} = \$6,064 \text{ (2014 cost estimate)}$

The letter of credit currently on file for financial capability should be increased to the amount of the 2014 cost estimate shown above. Please send the original, signed letter of credit amendment to the Department. Documentation should be mailed to my attention at: Virginia Department of Environmental Quality/5th Floor, Office of Financial Responsibility Programs and Data Management, 629 East Main Street, Richmond, VA 23219 on or before **April 21, 2014**

If you have any questions regarding the financial capability requirements, please contact me at (804) 698-4205 (toll free in Virginia 800-592-5482 ext. 4205) or via email at josiah.bennett@deq.virginia.gov. Thank you for your time and consideration in this matter.

Sincerely,

A large, stylized handwritten signature in black ink, consisting of a large loop on the left and a series of connected strokes on the right.

Josiah Q. Bennett
Office of Financial Responsibility Programs & Data
Management

To: PNC Bank, National Association
500 First Avenue, 2nd Floor
P7-PFSC-02-T
Pittsburgh, PA 15219



Application for Amendment To Standby Letter of Credit

1. Letter of Credit Number	18107235	2. Date	9/10/2014
3. Current Amount of Letter of Credit	\$6,000.00		
4. Applicant	Upshur J. Taylor	Applicant NAME ONLY	
5. Beneficiary		Beneficiary NAME ONLY	
6. Current Expiry	1/25/2015		

The following amendment(s) to the above-mentioned Letter of Credit are requested:

7. Credit Amount to be <u>Increased</u> by:	\$200.00
8. Credit Amount to be <u>Decreased</u> by:	

Note: The beneficiary's written consent is required for a decrease. Accordingly, the beneficiary's written consent should be obtained in advance and attached to this Application for Amendment (See Note below).

9. Amend Expiration Date to:	1/25/2016	<input type="checkbox"/> Check this box if Auto Extend provision should remain in force.
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10. Other (Please Specify other changes to the Letter of Credit)

Letter of Credit will be increased from \$6,000 to \$6,200. Expiration date will move out one year to 1/25/2016

Except as amended hereby, the terms and conditions of the Letter of Credit will remain in full force and effect.

11. Obligor Name

Upshur J. Taylor

Note: Pursuant to applicable law, an amendment to a letter of credit is effective when the beneficiary consents to it. However, if the amendment does not adversely affect the beneficiary's rights, then a written consent will not be necessary..

Signed By

Upshur J. Taylor

Printed Name

Upshur J. Taylor

Title

owner

Phone Number

757

Extension

894-1999

Fax Number